# DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

	3A13
	Revision 57
	CESSNA
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182A	182L
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	August 9, 2000

# TYPE CERTIFICATE DATA SHEET NO. 3A13

This data sheet which is part of Type Certificate No. 3A13 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Cessna Aircraft Company

P. O. Box 7704

Wichita, Kansas 67277

# I - Model 182, Skylane, 4 PCLM (Normal Category), Approved March 2, 1956

Engine Continental O-470-L

\*Fuel 80 minimum grade aviation gasoline

\*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and 1. Hartzell constant speed

Propeller Limits (a) Hub HC82XF-1 or HCA2XF-1 or BHCA2XF-1 with 8433-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.:

low 12°, high 24°

(b) Cessna spinner 0752006

(c) Woodward governor 210065, 210105, 210155 or 210340

2. McCauley constant speed

(a) Hub 2A36C with blades 90M-8

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 22°

(b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155, 210345 or 210452, or McCauley C290D2/T1 or C290D3/T1

3. Hartzell constant speed

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(a) Hub BHC-C2YF-1 with 8468-2 blades
Diameter: not over 82 in., not under 80 in.
Pitch settings at 30 in. sta.:
low 13°, high 24°

#### I - Model 182 (Cont'd)

Propeller and (b) Cessna spinner 0752619

Propeller Limits (cont'd) (c) Woodward governor 210105AF, 210340 or 210451

4. McCauley constant speed

(a) Hub 2A34C with 90A-8 or 90AT-8 blades Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 21.5°

(b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155, 210345 or 210452 or McCauley C290D2/T1 or C290D3/T1

\*Airspeed Limits Maneuvering 122 m.p.h. (106 knots)
(CAS) Maximum structural cruising 160 m.p.h. (139 knots)
Never exceed 184 m.p.h. (160 knots)

Flaps extended 100 m.p.h. (87 knots)

C.G. Range (+39.5) to (+45.8) at 2550 lb.

(+35.0) to (+45.8) at 2050 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

\*Maximum Weight 2550 lb.

No. of Seats 4 (2 at +36, 2 at +70)

Maximum Baggage 120 lb. (+95)

Fuel Capacity 60 gal. (55 gal. usable); two 30 gal. tanks in wings at +48.

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps Takeoff Retracted 0°
Movements 1st notch 10°

1st notch 10° 2nd notch 20°

Landing 3rd notch 30°

 $\begin{array}{ccc} & & & 4 \text{th notch} & 40^{\circ} \\ \text{Up} & 20^{\circ} \pm 2^{\circ} & & \text{Down} & 14^{\circ} \pm 2^{\circ} \end{array}$ 

Ailerons Up  $20^{\circ} \pm 2^{\circ}$  Down  $14^{\circ} \pm 2^{\circ}$ Adj. stabilizer Up  $1^{\circ} 50' \pm 15$  Down  $8^{\circ} 20' \pm 15'$ Elevator Up  $25^{\circ} \pm 1^{\circ}$  Down  $22^{\circ} 50' \pm 1^{\circ}$ 

(With stabilizer full down)

Rudder Right  $24^{\circ} \pm 1^{\circ}$  Left  $24^{\circ} \pm 1^{\circ}$ 

Serial Nos. Eligible Model 182: 613 and 33000 through 33842 (1956 Model)

#### II - Model 182A, Skylane, 4 PCLM (Normal Category), Approved December 7, 1956

Engine Continental O-470-L

\*Fuel 80 minimum grade aviation gasoline

\*Engine Limits

For all operations, 2600 r.p.m. (230 hp.)

#### II - Model 182A (cont'd)

Propeller and Propeller Limits

1. Hartzell constant speed

(a) Hub HC82XF-1 or HCA2XF-1 or BHCA2XF-1 with 8433-2 blades

Diameter: not over 82 in., not under 80 in. Pitch settings at 30 in. sta.: low 12°, high 24°

(b) Cessna spinner 0752006

(c) Woodward governor 210065, 210105, 210155 or 210340

2. McCauley constant speed

(a) Hub 2A36C with 90M-8 blades

Diameter: not over 82 in., not under 80 in. Pitch settings at 36 in. sta.: low 10.5°, high 22°

(b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155 or 210452, or McCauley C290D2/T1 or C290D3/T1

3. Hartzell constant speed

(a) Hub BHC-C2YF-1 with 8468-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.: low 13°, high 24°

(b) Cessna spinner 0752619

(c) Woodward governor 210105AF, 210340 or 210451

4. McCauley constant speed

(a) Hub 2A34C with 90A-8 or 90AT-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 21.5° (b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155, 210345, 210452,

or McCauley C290D2/T1 or C290D3/T1

\*Airspeed Limits Maneuvering 122 m.p.h. (106 knots)
(CAS) Maximum structural cruising 160 m.p.h. (139 knots)

Natural events 184 m.p.h. (160 knots)

Never exceed 184 m.p.h. (160 knots) Flaps extended 100 m.p.h. (87 knots)

C.G. Range (+40.0) to (+45.8) at 2650 lb.

(+33.5) to (+45.8) at 2100 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

\*Maximum Weight 2650 lb.

No. of Seats 4 (2 at +36, 2 at +70)

Maximum Baggage 120 lb. (+95)

Fuel Capacity 65 gal. (55 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

#### II - Model 182A (cont'd)

Control Surface	Wing flaps	Takeoff	Retracted	0°			
Movements			1st notch	10°			
			2nd notch	20°			
		Landing	3rd notch	30°			
			4th notch	40°			
	Ailerons	Up $20^{\circ} \pm 2^{\circ}$	Down	$14^{\circ} \pm 2^{\circ}$			
	Adj. stabilizer	Up 1° 50' ± 15	5' Down	$8^{\circ} \ 20' \pm 15'$			
	Elevator	Up $25^{\circ} \pm 1^{\circ}$	Down	$22^{\circ}$ 50' $\pm$ 1°			
	(With stabilizer full down)						
	Rudder	Right $24^{\circ} \pm 1^{\circ}$	Left	$24^{\circ} \pm 1^{\circ}$			
Serial Nos. Eligible Model 182A: 33843 through 34753 (1957 Model)							

Model 1824 · 34755 through 34999 and 51001 th

Model 182A: 34755 through 34999 and 51001 through 51556 (1958 Model)

# III - Model 182B, Skylane, 4 PCLM (Normal Category), Approved August 22, 1958

Engine Continental O-470-L

\*Fuel 80 minimum octane aviation gasoline

\*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and Propeller Limits

1. Hartzell constant speed

(a) Hub HC82XF-1 or HCA2XF-1 or BHCA2XF-1 with 8433-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.:

low 12°, high 24°

- (b) Cessna spinner 0752006
- (c) Woodward governor 210065, 210105, 210155, or 210340
- 2. McCauley constant speed
  - (a) Hub 2A36C with 90M-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 22°

- (b) Cessna spinner 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345, 210452, or McCauley C290D2/T1 or C290D3/T1
- 3. Hartzell constant speed
  - (a) Hub BHC-C2YF-1 with 8468-2 blades

Diameter: not over 82 in., not under 80 in. Pitch settings at 30 in. sta.: low 13°, high 24°

- (b) Cessna spinner 0752619
- (c) Woodward governor 210105AF, 210340, or 210451
- 4. McCauley constant speed
  - (a) Hub 2A34C with 90A-8 or 90AT-8 blades
    Diameter: not over 82 in., not under 80 in.
    Pitch settings at 36 in. sta.: low 10.5°, high 21.5°
  - (b) Cessna spinner 0752004
  - (c) Woodward governor 210065, 210105, 210155, 210345, 210452, or McCauley C290D2/T1 or C290D3/T1

\*Airspeed Limits (CAS) Maneuvering 122 m.p.h. (106 knots) Maximum structural cruising 160 m.p.h. (139 knots) Never exceed Flaps extended 184 m.p.h. (160 knots) 100 m.p.h. (87 knots)

# III - Model 182B, Skylane (Cont'd)

C.G. Range (+40.0) to (+45.8) at 2650 lb.

(+33.5) to (+45.8) at 2100 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

\*Maximum Weight 2650 lb.

No. of Seats 4 (2 at +36, 2 at +70)

Maximum Baggage 120 lb. (+95)

Fuel Capacity 65 gal. (55 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface	Wing flaps	Takeoff	Retracted	$0^{\circ}$
Movements			1st notch	10°
			2nd notch	20°
		Landing	3rd notch	30°
			4th notch	40°
	Ailerons	Up 20° <u>+</u> 2°	Down	14° <u>+</u> 2°
	Adj. stabilizer	Up 1° 50' <u>+</u> 15'	Down	8° 20' <u>+</u> 15'
	Elevator	Up 25° <u>+</u> 1°	Down	22° 50' <u>+</u> 1°
	(With stabilizer	full down)		
	Rudder	Right 24° <u>+</u> 1°	Left	24° <u>+</u> 1°

Serial Nos. Eligible Model 182B: 34754, 51557 through 52358 except 51623 (1959 Model)

# IV - Model 182C, Skylane, 4 PCLM (Normal Category), Approved July 8, 1959 Model 182D, Skylane, 4 PCLM (Normal Category), Approved June 14, 1960

Engine Continental O-470-L

\*Fuel 80 minimum octane aviation gasoline

\*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and 1. Hartzell constant speed

Propeller Limits (a) Hub HC82XF-1 or HCA

(a) Hub HC82XF-1 or HCA2XF-1 or BHCA2XF-1 with 8433-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.:

low 12°, high 24°

(b) Cessna spinner 0752006

(c) Woodward governor 210065, 210105, 210155, or 210340

2. McCauley constant speed

(a) Hub 2A36C with 90M-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 22°

(b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155, 210345, 210452, or McCauley C290D2/T1 or C290D3/T1

# IV - Model 182C, Model 182D (cont'd)

3. Hartzell constant speed

(a) Hub BHC-C2YF-1 with 8468-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.:

low  $13^{\circ}$ , high  $24^{\circ}$ 

(b) Cessna spinner 0752619

- (c) Woodward governor 210105AF, 210340, or 210451
- 4. McCauley constant speed
  - (a) Hub 2A34C with 90A-8 or 90AT-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 21.5°

- (b) Cessna spinner 0752004
- (c) Woodward governor 210065, 210105, 210155, 210345, 210452, or McCauley C290D2/T1 or C290D3/T1

*Airspeed Limits	Maneuvering	122 m.p.h. (106 knots)				
(CAS)	Maximum structural cruising	160 m.p.h. (139 knots)				
	Never exceed	184 m.p.h. (160 knots)				
	Flaps extended	100 m.p.h. (87 knots)				
C.G. Range	(+40.0) to (+45.8) at 2650 lb.					
	(+33.5) to (+45.8) at 2100 lb. or less					
	Straight line variation between poi	nts given				
Empty Wt. C.G. Range	None					
*Maximum Weight	2650 lb.					

No. of Seats 4 (2 at +36, 2 at +70)

Maximum Baggage 120 lb. (+95)

Fuel Capacity 65 gal. (55 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface	Wing flaps			Takeoff	$0^{\circ}$ , $10^{\circ}$ , $20^{\circ}$		
Movements				Landing	30°, 40°		
	Ailerons	Up	20° <u>+</u> 2°	Down	14° <u>+</u> 2°		
	Adj. stabilizer	Up	0° 45' <u>+</u> 15'	Down	8° 45' <u>+</u> 15'		
	Elevator	Up	25° <u>+</u> 1°	Down	22° 50' <u>+</u> 1°		
	(With stabilize	r full do	own)				
	Rudder	Right	24° <u>+</u> 1°	Left	24° <u>+</u> 1°		
(measured parallel to 0.0.W.L.)							

Serial Nos. Eligible Model 182C: 631, 52359 through 53007 (1960 Model)

Model 182D: 51623, 18253008 through 18253598 (1961 Model)

# V - Model 182E, Skylane, 4 PCLM (Normal Category), Approved June 27, 1961 Model 182F, Skylane, 4 PCLM (Normal Category), Approved August 1, 1962 Model 182G, Skylane, 4 PCLM (Normal Category), Approved July 19, 1963

Engine Continental O-470-L or 0-470-R

\*Fuel 80/87 minimum grade aviation gasoline

\*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and Propeller Limits

1. Hartzell constant speed

(a) Hub HC82XF-1 or HCA2XF-1 or BHCA2XF-1 with 8433-2 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.: low 12°, high 24°

(b) Cessna spinner 0752006

(c) Woodward governor 210065, 210105, 210155, or 210340

(Not eligible on O-470-R engine installation)

2. McCauley constant speed

(a) Hub 2A36C with 90M-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 22° (b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or McCauley C290D2/T1 or C290D3/T1

3. Hartzell constant speed

(a) Hub BHC-C2YF-1 with 8468-2 blades

Diameter: not over 82 in., not under 80 in. Pitch settings at 30 in. sta.: low 13°, high 24°

(b) Cessna spinner 0752619

(c) Woodward governor 210105AF, 210340, or 210451

4. McCauley constant speed

(a) Hub 2A34C with 90A-8 or 90AT-8 blades Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 21.5°

(b) Cessna spinner 0752004

(c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

\*Airspeed Limits Maneuvering 128 m.p.h. (111 knots)
(CAS) Maximum structural cruising 160 m.p.h. (139 knots)
Never exceed 193 m.p.h. (168 knots)
Flaps extended 110 m.p.h. (96 knots)

C.G. Range (+38.4) to (+47.4) at 2800 lb.

(+33.0) to (+47.4) at 2250 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

\*Maximum Weight 2800 lb.

No. of Seats 4 (2 at +36, 2 at +71)

Maximum Baggage

120 lb. (+97)

#### <u>V - Model 182E, Model 182F, Model 182G</u> (cont'd)

Fuel Capacity 65 gal. (60 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

40° +1°, -2° Control Surface Wing flaps Movements Elevator tab 25° ±2° Down  $15^{\circ} + 1^{\circ}$ Up Ailerons  $20^{\circ} + 2^{\circ}$ Down  $15^{\circ} + 2^{\circ}$ Up Down 17° <u>+</u>1° Elevator (relative to stabilizer) Up  $26^{\circ} + 1^{\circ}$ Rudder Left 24° ±1° Right 24° <u>+</u>1°

Serial Nos. Eligible Model 182E: 18253599 through 18254423 (1962 Model)

Model 182F: 18254424 through 18255058 (1963 Model) Model 182G: 18255059 through 18255844 (1964 Model)

# VI - Model 182H, Skylane, 4 PCLM (Normal Category), Approved September 17, 1964

Model 182J, Skylane, 4 PCLM (Normal Category), Approved October 20, 1965 Model 182K, Skylane, 4 PCLM (Normal Category), Approved August 3, 1966 Model 182L, Skylane, 4 PCLM (Normal Category), Approved July 28, 1967

Engine Continental O-470-R

\*Fuel 80/87 minimum grade aviation gasoline

\*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and 1. McCauley constant speed

Propeller Limits (a) Hub 2A34C66/90AT-8 blades

Diameter: not over 82 in., not under 80 in. Pitch settings at 36 in. sta.: low 10.5°, high 22°

(b) Cessna spinner 0752637

(c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

\*Airspeed Limits Maneuvering 128 m.p.h. (111 knots)
(CAS) Maximum structural cruising 160 m.p.h. (139 knots)

Never exceed 193 m.p.h. (168 knots) Flaps extended 110 m.p.h. (96 knots)

C.G. Range (+38.4) to (+47.4) at 2800 lb.

(+33.0) to (+47.4) at 2250 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

\*Maximum Weight 2800 lb.

No. of Seats 4 (2 at +36, 2 at +71)

Maximum Baggage 120 lb. (+97)

Fuel Capacity

65~gal. (60 gal. usable); two 32.5 gal. tanks in wings at +48~See NOTE 1 for data on unusable fuel

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#### <u>VI - Model 182H, Model 182J, Model 182K, Model 182L</u> (cont'd)

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps  $40^{\circ} + 1^{\circ}, -2^{\circ}$ Down  $15^{\circ} + 1^{\circ}$ Movements Elevator tab 25° ±2° Up Ailerons Up  $20^{\circ} + 2^{\circ}$ Down  $15^{\circ} + 2^{\circ}$ Elevator(relative to stabilizer) Up 26° ±1° Down 17° ±1° 24° ±1° Left 24° ±1° Rudder Right

Serial Nos. Eligible Model 182H: 634, 18255846 through 18256684 (1965 Model)

Model 182J: 18256685 through 18257625 (1966 Model)

Model 182K: 18255845, 18257626 through 18257698, 18257700 through 18258505

(1967 Model)

Model 182L: 18258506 through 18259305 (1968 Model)

# VII - Model 182M, Skylane, 4 PCLM (Normal Category), Approved September 19, 1968

Engine Continental O-470-R

\*Fuel 80/87 minimum grade aviation gasoline

\*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and Propeller Limits

- 1. McCauley constant speed
  - (a) Hub 2A34C66/90AT-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 36 in. sta.: low 10.5°, high 22° (b) Cessna spinner 0752637

- (c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1
- 2. McCauley constant speed
  - (a) Hub 2A34C201/90DA-8 blades

Diameter: not over 82 in., not under 80 in.

Pitch settings at 30 in. sta.: low 13°, high 24.5°

- (b) Cessna spinner 0752637
- (c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1
- 3. McCauley constant speed
  - (a) Hub 2A34C203/90DCA-8 blades

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.: low 12.5°, high 25°

- (b) Cessna spinner 0752637
- (c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

\*Airspeed Limits Maneuvering 128 m.p.h. (111 knots) (CAS) Maximum structural cruising 160 m.p.h. (139 knots)

Never exceed 193 m.p.h. (168 knots) Flaps extended 110 m.p.h. (96 knots) C.G. Range (+38.4) to (+47.4) at 2800 lb.

(+33.0) to (+47.4) at 2250 lb. or less

Straight line variation between points given

#### VII - Model 182M (cont'd)

Empty Wt. C.G. Range None

\*Maximum Weight 2800 lb.

No. of Seats 4 (2 at +36, 2 at +71)

Maximum Baggage 120 lb. (+97)

Fuel Capacity 65 gal. (60 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps  $40^{\circ} + 1^{\circ}, -2^{\circ}$ Movements 15° ±1° Elevator tab Up 25° ±2° Down Ailerons Up 20° ±2° Down  $15^{\circ} + 2^{\circ}$ Elevator(relative to stabilizer) Up  $26^{\circ} \pm 1^{\circ}$ 17° <u>+</u>1° Down 24° <u>+</u>1° Right 24° ±1° Rudder Left

Serial Nos. Eligible Model 182M: 18257699, 18259306 through 18260055 (1969 Model)

# VIII - Model 182N, Skylane, 4 PCLM (Normal Category), Approved September 17, 1969

Engine Continental O-470-R

Continental O-470-S (See NOTE 4)

\*Fuel 80/87 minimum grade aviation gasoline

\*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and Propeller Limits 1. McCauley constant speed

(a) Hub 2A34C201/90DA-8 blades

Diameter: not over 82 in., not under 80 in. Pitch settings at 30 in. sta.: low 13°, high 24.5°

- (b) Cessna spinner 0752637
- (c) Woodward governor 210065, 210105, 210155, 210345, or A210452, or Garwin 34-828-01-2A, or McCauley C290D2/T1 or C290D3/T1
- 2. McCauley constant speed
  - (a) Hub 2A34C66/90AT-8 blades

Diameter: not over 82 in., not under 80 in. Pitch settings at 36 in. sta.: low 10.5°, high 22°

- 2. (b) Cessna spinner 0752637
  - (c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1
- 3. McCauley constant speed
  - (a) Hub 2A34C203/90DCA-8 blades

Diameter: not over 82 in., not under 80.5 in. Pitch settings at 30 in. sta.: low 12.5°, high 25°

- (b) Cessna spinner 0752637
- (c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

\*Airspeed Limits (CAS)

Maneuvering131 m.p.h. (114 knots)Maximum structural cruising160 m.p.h. (139 knots)Never exceed198 m.p.h. (172 knots)Flaps extended110 m.p.h. (96 knots)

#### VIII - Model 182N (cont'd)

C.G. Range (+39.9) to (+47.4) at 2950 lb.

(+38.4) to (+47.4) at 2800 lb. (+33.0) to (+47.4) at 2250 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

\*Maximum Weight 2950 lb. takeoff only, 2800 lb. landing

No. of Seats 4 Front standard (2 at +36 to +49)

Optional (2 at +32 to +44)

Rear (2 at +74)

Maximum Baggage 120 lb. (+97) (S/N 18260056 through 18260445)

120 lb. (+97) and 80 lb. (+117) (S/N 18260446 and up)

Fuel Capacity 65 gal. (60 gal. usable); two 32.5 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface Wing flaps Down  $40^{\circ} + 1^{\circ}, -2^{\circ}$ Movements Elevator tab Up  $25^{\circ} \pm 2^{\circ}$ Down 15° ±1° Down 15° <u>+</u>2° Up  $20^{\circ} \pm 2^{\circ}$ Ailerons Elevator(rel. to stabilizer) Up  $26^{\circ} + 1^{\circ}$ Down  $17^{\circ} + 1^{\circ}$ Rudder (parallel to 0.00 W.L.) Right  $24^{\circ} \pm 1^{\circ}$ Left  $24^{\circ} \pm 1^{\circ}$ (Perpendicular to hinge line) Right 27° 13' ±1° Left 27° 13' ±1°

Serial Nos. Eligible Model 182N: 18260056 through 18260445 (1970 Model) 18260446 through 18260825

(1971 Model)

# IX - Model 182P, Skylane, 4 PCLM (Normal Category), Approved October 8, 1971

Engine Continental O-470-R, Aircraft S/N 18260826 through 18263475

Continental O-470-S, Aircraft S/N 18260826 and up (See NOTE 4)

\*Fuel 80/87 minimum grade aviation gasoline

\*Engine Limits For all operations, 2600 r.p.m. (230 hp.)

Propeller and

1. McCauley constant speed

Propeller Limits (a) Hub 2A34C201/90DA-8 blades

Diameter: not over 82 in., not under 80 in. Pitch settings at 30 in. sta.: low 13°, high 24.5°

(b) Cessna spinner 0752637

(c) Woodward governor 210065, 210105, 210155, 210345, or A210452, or Garwin 34-828-01-2A, or McCauley C290D2/T1 or C290D3/T1

2. McCauley constant speed

(a) Hub 2A34C66/90AT-8 blades

Diameter: not over 82 in., not under 80 in. Pitch settings at 36 in. sta.: low 10.5°, high 22°

(b) Cessna spinner 0752637

(c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

#### IX - Model 182P, Skylane (Cont'd)

3. McCauley constant speed

(a) Hub 2A34C203/90DCA-8 blades

Diameter: not over 82 in., not under 80.5 in. Pitch settings at 30 in. sta.: low 12.5°, high 25°

(b) Cessna spinner 0752637

(c) Woodward governor 210065, 210105, 210155, 210345, or 210452, or Garwin 34-828-01, or McCauley C290D2/T1 or C290D3/T1

\*Airspeed Limits (S/N 675, 18260826 through 18264295)

(CAS) Maneuvering 126 m.p.h. (109 knots)

M aximum structural cruising 160 m.p.h. (139 knots) Never exceed 198 m.p.h. (172 knots) Flaps extended 110 m.p.h. (96 knots)

\*Airspeed Limits (S/N 18264296 through 18265175)

(IAS) Maneuvering 110 knots (See NOTE 5 on use of IAS) Maximum structural cruising 141 knots

> Never exceed 176 knots Flaps extended 95 knots

C.G. Range (+39.5) to (+48.5) at 2950 lb.

(+33.0) to (+48.5) at 2250 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

\*Maximum Weight 2950 lb.

No. of Seats 4 (2 front at +32.0 to +50.0)

(2 rear at +74)

Maximum Baggage Serial Numbers 18260826 through 18263475

200 lb. (120 lb. at + 82.0 to +108.0) (80 lb. at +108.0 to +124.0)

Serial Numbers 675 and 18263476 through 18265175

200 lb. (120 lb. at + 82.0 to +108.0) (80 lb. at +108.0 to +136.0)

Fuel Capacity (S/N 675, 18260826 through 18262250)

Standard Range Tanks:

65 gal. (60 gal. usable); two 32.5 gal. tanks in wings at +48

Long Range Tanks:

84 gal. (79 gal. usable); two 42.0 gal. tanks in wings at +48

(S/N 18262251 through 18265175)

Standard Range Tanks:

61 gal. (56 gal. usable); two 30.5 gal. tanks in wings at +48

Long Range Tanks:

80 gal. (75 gal. usable); two 40.0 gal. tanks in wings at +48

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15) (6 qt. usable)

See NOTE 1 for data on undrainable oil

# IX - Model 182P, Skylane (Cont'd)

Control Surface Wing flaps Down  $40^{\circ} + 1^{\circ}, -2^{\circ}$ Movements Elevator tab Up 25° ±2° Down  $15^{\circ} \pm 1^{\circ}$ Ailerons Up 20° ±2° Down 15° ±2° Elevator (rel. to stabilizer) Up  $26^{\circ} + 1^{\circ}$ Down  $17^{\circ} + 1^{\circ}$ Right  $24^{\circ} \pm 1^{\circ}$ Left  $24^{\circ} \pm 1^{\circ}$ Rudder(parallel to 0.00 W.L.) (perpendicular to hinge line) Right  $27^{\circ} 13' \pm 1^{\circ}$ Left 27° 13' ±1°

Serial Nos. Eligible Model 182P: 18260826 through 18261425 (1972 Model)

18261426 through 18262465 (1973 Model) 18262466 through 18263475 (1974 Model)

675, 18263476 through 18264295 except 18263479 (1975 Model)

18264296 through 18265175 (1976 Model)

# X - Model 182Q, Skylane, 4 PCLM (Normal Category), Approved July 28, 1976

Engine Continental O-470-U

\*Fuel 100/130 minimum aviation grade gasoline (S/N 18265176 through 18265965)

100LL/100 aviation grade gasoline (S/N 18265966 through 18267715)

\*Engine Limits For all operations, 2400 r.p.m. (230 hp.)

Propeller and McCauley constant speed

Propeller Limits (a) Hub C2A34C204/90DCB-8 blades

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.: low 15°, high 29.4° (b) Cessna spinner 0752637

(b) Cessia spinier 0732037

(c) McCauley governor C290D3/T14

\*Airspeed Limits Maneuvering 111 knots (IAS) Maximum structural cruising 143 knots (See NOTE 5 on use of IAS) Never exceed 179 knots Flaps extended 95 knots

C.G. Range (+39.5) to (+48.5) at 2950 lb.

(+33.0) to (+48.5) at 2250 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

\*Maximum Weight 2950 lb.

No. of Seats 4 (2 front at +32.0 to +50.0)

(2 rear at +74)

Maximum Baggage 200 lb. (120 lb. at +82.0 to +108.0)

(80 lb. at + 108.0 to + 136.0)

Fuel Capacity Standard Range Tanks:

61 gal. (56 gal. usable); two 30.5 gal. tanks in wings at +48

 $(S/N\ 18263479,\ 18265176\ through\ 18266590)$ 

Long Range Tanks: 80 gal. (75 gal. usable); two 40.0 gal. tanks in wings at +48 (S/N 18263479, 18265176 through 18266590)

#### X - Model 182Q (cont'd)

Fuel Capacity (Cont'd) 92 gal. (88 gal. usable); two 46.0 gal. integral tanks in wings at +46.5

(S/N 18266591 through 18267715)

See NOTE 1 for data on unusable fuel

Oil Capacity 12 qt. (-15.0) (6 qt. usable)

See NOTE 1 for data on undrainable oil

Control Surface Down  $40^{\circ} + 1^{\circ}$ ,  $-2^{\circ}$ Wing flaps Up 25° ±2° Movements Elevator tab Down  $15^{\circ} + 1^{\circ}$ Ailerons Up  $20^{\circ} \pm 2^{\circ}$ Down  $15^{\circ} + 2^{\circ}$ Elevator (rel. to stabilizer) Up 26° ±1° Down  $17^{\circ} \pm 1^{\circ}$ Rudder (parallel to 0.00 W.L.) Right  $24^{\circ} \pm 1^{\circ}$ Left  $24^{\circ} \pm 1^{\circ}$ Right  $27^{\circ} 13' \pm 1^{\circ}$ Left 27° 13' ±1° (perpendicular to hinge line)

Serial Nos. Eligible Model 182Q: 18265176 through 18265965 (1977 Model)

18263479, 18265966 through 18266590 (1978 Model) 18266591 through 18267300 (1979 Model) 18267301 through 18267715, except 18267302 (1980 Model)

# XI - Model R182, Skylane RG, 4 PCLM (Normal Category), Approved July 7, 1977 Model TR182, Turbo Skylane RG, 4 PCLM (Normal Category), Approved September 12, 1978

#### **Model R182**

Engine Lycoming O-540-J3C5D, rated at 235 hp.

\*Fuel 100LL/100 aviation grade gasoline

\*Engine Limits Full throttle for all operations, 2400 r.p.m.

Propeller and Propeller Limits

1. McCauley constant speed (S/N R18200002 through R18201313)

(a) Hub B2D34C214/90DHB-8 blades

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.: low 15.8°, high 29.4°

- (b) Cessna spinner 2250003
- (c) McCauley governor C290D3/T16
- 2. McCauley constant speed (S/N R18201314 through R18201628)
  - (a) Hub B2D34C218/90DHB-8 blades

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.: low 15.8°, high 29.4°

- (b) Cessna spinner 2250124
- (c) McCauley governor C290D3/T22
- McCauley constant speed (S/N R18201629 through R18202041 and aircraft reworked per SK182-71)
  - (a) Hub B3D32C407/82NDA-3 blades

Diameter: not over 79 in., not under 78 in. Pitch settings at 30 in. sta.: low 16.0°, high 31.7°

- (b) Cessna spinner 2252076
- (c) McCauley governor C290D3/T22

# XI - Model R182, Model TR182, Turbo Skylane RG (cont'd)

# Model TR182

Engine Lycoming O-540-L3C5D, rated at 235 hp.

(Turbocharged in accordance with Cessna Drawing No. 2250065)

\*Fuel 100LL/100 aviation grade gasoline

\*Engine Limits For all operations, 2400 r.p.m., 31 in. hg. mp.

Propeller and Propeller Limits 1. McCauley constant speed (S/N R18200001, R18200584 through R18201313)

(a) Hub B2D34C217/90DHB-8

Diameter: not over 82 in., not under 80.5 in. Pitch settings at 30 in. sta.: low 15.8°, high 31.9°

- (b) Cessna spinner 2250003
- (c) McCauley governor C290D3/T21
- 2. McCauley constant speed (S/N R18201314 and up)
  - (a) Hub B2D34C219/90DHB-8

Diameter: not over 82 in., not under 80.5 in. Pitch settings at 30 in. sta.: low 15.8°, high 31.9°

- (b) Cessna spinner 2250124
- (c) McCauley governor C290D3/T22
- McCauley constant speed (S/N R18201315, R18201629 and up and aircraft reworked per SK182-71 or SK182-72)
  - (a) Hub B3D32C407/82NDA-3

Diameter: not over 79 in., not under 78 in. Pitch settings at 30 in. sta.: low 16.0°, high 31.7°

- (b) Cessna spinner 2252076
- (c) McCauley governor C290D3/T22

# Models R182, TR182

*Airspeed Limits	1978 Model R182	Maneuvering	112 knots
(IAS)		Maximum structural cruising	143 knots
(See NOTE 5 on use of IAS)		Never exceed	182 knots
,		Flaps extended	95 knots
		Landing gear extension	140 knots
	1979 Model R182	Maneuvering	112 knots
		Maximum structural cruising	160 knots
		Never exceed	182 knots
		Flaps extended	95 knots
		Landing gear extension	140 knots
	Model TR182	Maneuvering	112 knots
		Maximum structural cruising	157 knots
		Never exceed	179 knots
		Flaps extended	95 knots
		Landing gear extension	140 knots
1	980 and up Model R182	Maneuvering	112 knots
		Maximum structural cruising	159 knots
		Never exceed	181 knots
		Flaps extended	95 knots
		Landing gear extension	140 knots
	Model TR182	Maneuvering	112 knots
		Maximum structural cruising	157 knots
		Never exceed	178 knots
		Flaps extended	95 knots
		Landing gear extension	140 knots

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#### XI - Model R182, Model TR182 (cont'd)

C.G. Range

(a) S/N R18200001 through R18201628 except R18200975 & R18201315

(+40.9) to (+47.0) at 3100 lb. (+35.5) to (+47.0) at 2700 lb. (+33.0) to (+47.0) at 2250 lb. or less Straight line variation between points given

Moment change due to retracting gear (+3052 in.-lb.)

(b) <u>S/N R18200975, R18201315, R18201629 through R18202041</u>

(+40.9) to (+46.0) at 3100 lb. (+35.5) to (+46.0) at 2700 lb. (+33.0) to (+46.0) at 2250 lb. or less Straight line variation between points given

Moment change due to retracting gear (+3052 in.-lb.)

Empty Wt. C.G. Range

None

\*Maximum Weight

3100 lb.

No. of Seats

4 (2 front at +32.0 to +50.0)

(2 rear at +74.0)

Maximum Baggage

200 lb. (120 lb. at +82.0 to +110.0) ( 80 lb. at +110.0 to +134.0)

Fuel Capacity

(a) <u>S/N R18200002 through R18200583</u>

Standard Range Tanks:

61 gal. (56 gal. usable); two 30.5 gal. tanks in wings at +48

Long Range Tanks:

80 gal. (75 gal. usable); two 40.0 gal. tanks in wings at +48

(b) <u>S/N R18200001, R18200584 through R18202041</u>

92 gal. (88 gal. usable); two 46.0 gal. integral tanks

in wings at +46.5

See NOTE 1 for data on unusable fuel

Oil Capacity

9 qt. (-14.8)

See NOTE 1 for data on oil

Control Surface Movements (a) S/N R18200001 through R18201628 except R18200975 & R18201315

Wing flaps			Down	40° +1°, -2°
Elevator tab	Up	25° <u>+</u> 2°	Down	15° <u>+</u> 1°
Ailerons	Up	20° <u>+</u> 2°	Down	15° <u>+</u> 2°
Elevator (rel. to				
stabilizer)	Up	28° <u>+</u> 1°	Down	17° <u>+</u> 1°
Rudder (parallel to 0.00 W.L.)	Right	24° <u>+</u> 1°	Left	24° <u>+</u> 1°
(Perpendicular to hinge line)	Right	27° 13' +1°	Left	27° 13' +1°

(b) S/N R18200975, R18201629 through R18201798

Wing flaps			Down	$40^{\circ} + 1^{\circ}, -2^{\circ}$
Elevator tab	Up	24° <u>+</u> 2°	Down	15° <u>+</u> 1°
Ailerons	Up	20° <u>+</u> 2°	Down	15° <u>+</u> 2°
Elevator (rel. to stabilizer)	Up	28° <u>+</u> 1°	Down	21° <u>+</u> 1°
Rudder (parallel to 0.00 W.L.)	Right	24° +0°, -1°	Left	24° +0°, -1°
(Perpendicular to hinge line)	Right	27° 13' +0°1°	Left	27° 13' +0° -1°

#### XI - Model R182, Model TR182 (cont'd)

# S/N R18201315, R18201799 through R18202041

Wing flaps Down  $38^{\circ} + 0^{\circ}, -1^{\circ}$ Elevator tab Up 24° ±2° 15° ±1° Down Ailerons Up  $20^{\circ} + 1^{\circ}$ Down  $15^{\circ} + 2^{\circ}$ Up 28° ±1° Elevator (rel. to stabilizer) Down  $21^{\circ} \pm 1^{\circ}$ Rudder (parallel to 0.00 W.L.) Right  $24^{\circ} + 0^{\circ}$ ,  $-1^{\circ}$ Left  $24^{\circ} + 0^{\circ}, -1^{\circ}$ (Perpendicular to hinge line) Right  $27^{\circ} 13' + 0^{\circ}$ ,  $-1^{\circ}$  Left  $27^{\circ} 13' + 0^{\circ}$ ,  $-1^{\circ}$ 

Serial Nos. Eligible Model R182: R18200002 through R18200583 (1978 Model)

Model R182/TR182: R18200001, R18200584 through R18201313 (1979 Model)

Model R182/TR182: R18201314 through R18201628

except R18201315 (1980 Model)

Model R182/TR182: R18201629 through R18201798 (1981 Model) Model R182/TR182: R18201799 through R18201928 (1982 Model) Model R182/TR182: R18201929 through R18201973 (1983 Model) Model R182/TR182: R18201974 through R18201999 (1984 Model) Model R182/TR182: R18201315, R18202000 through R18202031 (1985 Model) Model R182/TR182: R18202032 through R18202041 (1986 Model)

# XII - Model 182R, 4 PCLM (Normal Category), Approved August 29, 1980

#### Model T182, 4 PCLM (Normal Category), Approved August 15, 1980

# Model 182R

Engine Continental O-470-U

\*Fuel 100LL/100 aviation grade gasoline

\*Engine Limits For all operations, 2400 r.p.m. (230 hp.)

Propeller and McCauley constant speed **Propeller Limits** 

(a) Hub C2A34C204/90DCB-8

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.: low 15°, high 29.4° (b) Cessna spinner 0752637

(c) McCauley governor C290D3/T14

Model T182

Lycoming 0-540-L3C5D, rated at 235 hp. Engine

(Turbocharged in accordance with Cessna Drawing No. 2250065)

\*Fuel 100LL/100 aviation grade gasoline

\*Engine Limits For all operations, 2400 r.p.m., 31 in. Hg. mp.

Propeller and McCauley constant speed

Propeller Limits (a) Hub B2D34C219/90DHB-8

Diameter: not over 82 in., not under 80.5 in.

Pitch settings at 30 in. sta.: low 15.8°, high 31.9° (b) Cessna spinner 2250124

(c) McCauley governor C290D3/T22

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# XII - Model 182R, Model T182 (Cont'd)

# Models 182R/T182

(IAS)

(See NOTE 5 on Use of IAS)

Propeller and 2. McCauley constant speed

Propeller Limits (Cont'd) (a) Hub B3D32C407/82NDA-3

Diameter: not over 79 in., not under 78 in.

Pitch settings at 30 in. sta.: low 16.0°, high 31.7° (b) Cessna spinner 2252076

(c) McCauley governor C290D3/T22

Flaps extended

\*Airspeed Limits Model 182R Maneuvering 111 knots

Maximum structural cruising 143 knots Never exceed 179 knots

Model T182 Maneuvering 111 knots

Maximum structural cruising 140 knots
Never exceed 178 knots
Flaps extended 95 knots

95 knots

C.G. Range Model 182R (+40.9) to (+46.0) at 3100 lb.

(+33.0) to (+46.0) at 2250 lb. or less

Straight line variation between points given

Model T182 (+40.9) to (+46.0) at 3100 lb.

(+35.5) to (+46.0) at 2700 lb. (+33.0) to (+46.0) at 2250 lb. or less Straight line variation between points given

Empty Wt. C.G. Range None

\*Maximum Weight 3100 lb. takeoff/flight

2950 lb. landing

No. of Seats 4 (2 front at +32.0 to +50.0)

(2 rear at +74.0)

Maximum Baggage 200 lb. (120 lb. at +92.0 to +108.0)

(80 lb. at + 108.0 to + 136.0)

Fuel Capacity 92 gal. (88 gal. usable); two 46 gal. integral tanks in wings at +46.5

See NOTE 1 for data on unusable fuel

Oil Capacity <u>Model 182R</u> <u>Model T182</u>

12 qt. (-15.0) 9 qt (-14.8) (6 qt. usable) (6 qt. usable)

(through S/N 18268055) See NOTE 1 for data on oil

12 qt. (-14.1) (6 qt. usable)

(S/N 18268056 and on) See NOTE 1 for data on oil 3A13 36 Rev. 57

#### XII - Model 182R, Model T182 (cont'd)

Control Surface	(a) <u>S/N 18267716 through 18268055</u>							
Movements	Wing flaps				Down	$40^{\circ}$ +1°, -2°		
	Elevator tab		Up	24° <u>+</u> 2°	Down	15° <u>+</u> 1°		
	Ailerons		Up	20° <u>+</u> 2°	Down	15° <u>+</u> 2°		
	Elevator (rel	to						
	stabilizer)		Up	28° <u>+</u> 1°	Down	21° <u>+</u> 1°		
	Rudder (para	llel to						
	0.00 W.L.)	]	Right	24° +0°, -1°	Left	$24^{\circ} + 1^{\circ}, -0^{\circ}$		
	(Perpendicul	ar to						
	hinge line)	]	Right	27° 13′ +0°, -1	° Left	27° 13′ +0°, -1°		
	(b) <u>S/N 1826805</u>	6 through 18268;	<u>586</u>					
	Wing flaps				Down	38° +0°, -1°		
	Elevator tab		Up	24° <u>+</u> 2°	Down	15° ±1°		
	Ailerons		Up	20° <u>+</u> 2°	Down	15° <u>+</u> 2°		
	Elevator (rel	to						
	stabilizer)		Up	28° <u>+</u> 1°	Down	21° <u>+</u> 1°		
	Rudder (para							
	0.00 W.L.)		Right	24° +0°, -1°	Left	24° +0°, -1°		
	(Perpendicul							
	hinge line)	]	Right	$27^{\circ} 13' + 0^{\circ}, -1$	° Left	27° 13′ +0°, -1°		
a	3.4.1.1.40ap.m.				• • • • • • •			
Serial Nos. Eligible				716 through 182	268055	(1981 Model)		
			C	th 18268293		(1982 Model)		
			_	th 18268368		(1983 Model)		
			_	th 18268434		(1984 Model)		
			_	th 18268541		(1985 Model)		
(100/3/ 1.1)	Model 182R:	18268542	throug	th 18268586		(1986 Model)		
(1986 Model)								

#### **Data Pertinent to Model Items I through XII**

Datum Front face of firewall

Upper door sill. Top surface centerline of tailcone (S/N 18253599 through 18265965) Leveling Means

Jig located nutplates and screws on left of tailcone (S/N 18263479, 18265966 through

18268586) (S/N R18200001 through 18202041)

Certification Basis 182 Series

> Part 3 of the Civil Air Regulations dated November 1, 1949, as amended by 3-1 through 3-12 and Paragraph 3.112 as amended October 1, 1959, for the Model 182E and on. In addition, effective S/N 18266591 through 18268586, FAR 23.1559 effective March 1, 1978. FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-6 for Model 182Q and on. In addition, effective S/N 18268435 through 18268586, FAR 23.1545(a)

Amendment 23-23 dated December 1, 1978.

#### Model T182

Part 3 of the Civil Air Regulations dated November 1, 1949, as amended by 3-1 through 3-12 and Paragraph 3.112 as amended October 1, 1959; and Sections 23.901, 23.909, 23.1041, 23.1043, 23.1143, and 23.1305 of the Federal Aviation Regulations dated February 1, 1965, as amended February 14, 1975; FAR 23.1559 effective March 1, 1978; FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-10. In addition,

effective S/N 18268435 through 18268541, FAR 23.1545(a) Amendment 23-23 dated December 1, 1978.

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#### Data Pertinent to Model Items I through XII, continued

#### Model R182

Part 3 of the Civil Air Regulations dated November 1, 1949, as amended by 3-1 through 3-12 and Paragraph 3.112 as amended October 1, 1959; and Sections 23.729, 23.777(e), 23.781, 23.1555(e)(1) and (2), and 23.1563 of the Federal Aviation Regulations dated February 1, 1965, as amended February 14, 1975. In addition, effective S/N R18200001, R18200584 and up, FAR 23.1559 effective March 1, 1978. FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-6. In addition, effective S/N R18202000 through R18202041, FAR 23.1545(a) Amendment 23-23 dated December 1, 1978.

#### Model TR182

Part 3 of the Civil Air Regulations dated November 1, 1949, as amended by 3-1 through 3-12 and Paragraph 3.112 as amended October 1, 1969; and Sections 23.729, 23.777(e), 23.781, 23.901, 23.909, 23.1041, 23.1043, 23.1143, 23.1305, 23.1555(e)(1) and (2), and 23.1563 of the Federal Aviation Regulations dated February 1, 1965, as amended February 14, 1975; FAR 23.1559 effective March 1, 1978; FAR 36 dated December 1, 1969, plus Amendments 36-1 through 36-9. In addition, effective S/N R18202000 through R18202041, FAR 23.1545(a) Amendment 23-23 dated December 1, 1978.

Application for Type Certificate dated July 11, 1955.

Type Certificate No. 3A13 issued March 2, 1956, obtained by the manufacturer under delegation option procedures.

#### **Equivalent Safety Items:**

#### S/N 18263479, 18264296 through 18267715

Airspeed Indicator CAR 3.757 (See NOTE 5 on use of IAS)

Operating Limitations CAR 3.778(a)

#### S/N 18267716 through 18268586

Airspeed Indicator CAR 3.757 (See NOTE 5 on use of IAS)

(S/N 18267716 through 18268434)

Operating Limitations CAR 3.778(a) Fuel System CAR 3.430

#### S/N R18200001 through R18202041

Airspeed Indicator CAR 3.757 (See NOTE 5 on use of IAS)

(S/N R18200001 through R18201999)

Operating Limitations CAR 3.778(a) Fuel System CAR 3.430

Production Basis

Production Certificate No. 4. Delegation Option Manufacturer No. CE-1 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations.

Equipment:

The basic required equipment as prescribed in the applicable airworthiness requirements (see Certification Basis) must be installed in the aircraft for certification. This equipment must include a current Airplane Flight Manual effective S/N 18266591 through 18268586 and R18200584 through R18202041. In addition, the following item of equipment is required:

1. Stall warning indicator, Cessna Dwg. S1672-5.

The equipment portion of Aircraft Specification 3A13, Revision 15, or Cessna Publication TS3000-13 should be used for equipment references on all aircraft prior to the Model 182G. Refer to the applicable Equipment List for the Model 182G and subsequent models.

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#### Data Pertinent to Model Items I through XII, continued

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification.

Serial Numbers 613 and 33000 through 34999

631 and 51001 through 53007

18253008 through 18264295 except 18263479

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 30 lb. (+46) on Models 182, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N and 182P through 18264295 and 60 lb. (+46) on Models 182A, 182B, 182C and 182D and undrainable oil of 0 lb.

Serial Numbers 18263479, 18264296 through 18266590

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 30 lb. (+46) and full oil of 22.5 lb. at (-15.0).

# Serial Numbers 18266591 through 18268055

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 24 lb. at (+48) and full oil of 22.5 lb. at (-15.0) for the 182Q, 182R Model, and include oil of 16.9 lb. at (-14.8) for the T182 Model.

#### Serial Numbers 18268056 through 18268586

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 24 lb. at (+48) and full oil of 24.4 lb. at (-14.1) for the 182R, and include oil of 16.9 lb. at (-14.8) for the T182.

### Serial Numbers R18200002 through R18200583

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 30 lb. (+46) and include oil of 16.9 lb. (-15.7).

## Serial Numbers R18200001, R18200584 through R18202041

The certificated empty weight and corresponding center of gravity location must include unusable fuel of 24 lb. (+48) and include oil of 16.9 lb. (-14.8).

NOTE 2. The following placards must be displayed in locations as indicated:

### A. Applicable to Model 182 only:

- (1) In full view of the pilot:
  - (a) "This airplane must be operated as a normal category airplane in compliance with operating limitations stated in the form of placards, markings and manuals. No acrobatic maneuvers including spins approved.

# Flight Maneuvering Load Factors

Flaps Up +3.8 -1.52 Flaps Down +3.5 Maximum design weight 2550 lb.

Reference weight and balance data for loading instructions."

- (b) "Both tanks on for takeoff and landing."
- (c) "Flaps Pull to extend

1		
Takeoff	Retracted	$0^{\circ}$
	1st Notch	10°
	2nd Notch	$20^{\circ}$
Landing	3rd Notch	30°
	4th Notch	40°

(2) In baggage compartment

"Maximum baggage 120 lb. For additional loading instructions see weight and balance data."

## B. Applicable to Models 182A, 182B, 182C and 182D

- (1) In full view of the pilot:
  - (a) "This airplane must be operated as a normal category airplane in compliance with operating limitations stated in the form of placards, markings and manuals. No acrobatic maneuvers including spins approved.

Flight Maneuvering Load Factors

Flaps Up +3.8 -1.52 Flaps Down +3.5 Maximum design weight 2650 lb.

Reference weight and balance data for loading instructions."

- (b) "Both tanks on for takeoff and landing."
- (c) "Flaps Pull to extend

Takeoff Retracted  $0^{\circ}$ 1st Notch  $10^{\circ}$ 2nd Notch  $20^{\circ}$ Landing 3rd Notch  $30^{\circ}$ 4th Notch  $40^{\circ}$ "

(2) In baggage compartment

"Maximum baggage 120 lb. For additional loading instructions see weight and balance data."

#### C. Applicable to Models 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M

- (1) In full view of the pilot:
  - (a) "This airplane must be operated as a normal category airplane in compliance with operating limitations stated in the form of placards, markings and manuals. No acrobatic maneuvers including spins approved.

# Flight Maneuvering Load Factors

Flaps Up +3.8 -1.52

Flaps Down +3.5

Maximum design weight 2800 lb.

Reference weight and balance data for loading instructions."

(2) On the fuel selector valve plate:

"Both off. Left tank level flight only 31 gal. Both on for landing and takeoff all flight attitudes 60 gal. Right tank level flight only 31 gal."

(3) On the control lock:

"Control lock - Remove before starting engine."

(4) On the baggage door:

"120 lb. maximum baggage and/or auxiliary seat passengers. For additional loading instructions, see weight and balance data."

# D. Applicable to Models 182N:

- (1) In full view of the pilot:
  - (a) Serial Numbers 18260056 through 18260445

"This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

No acrobatic maneuvers, including spins, approved

**Maximums** 

Design weight 2950 lb. takeoff Alt. loss in stall recovery-160 ft.
2800 lb. landing Flight Maneuvering Load Factors

Maneuvering speed 131 m.p.h.-CAS Flaps up +3.8, -1.52, Flaps down +3.5

Reference weight and balance data for loading instructions"

(b) Serial Numbers 182670446 through 18260825

"This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

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#### Data Pertinent to Model Items I through XII, continued

## D. Applicable to Models 182N, continued:

#### Maximums

Maneuvering speed 131 m.p.h. CAS (114 knots)

Gross weight Takeoff 2950 lb.

Landing 2800 lb.

Flight load factor Flaps up +3.8, -1.52

Flaps down +3.5

No acrobatic maneuvers, including spins, approved. Altitude loss in a stall recovery 160 ft. Known icing conditions to be avoided. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR" (as applicable)

(2) On the fuel selector valve plate:

"Both off. Left tank level flight only 31 gal. Both on for landing and takeoff all flight attitudes, 60 gal. Right tank level flight only 31 gal."

(3) On the control lock:

"Control lock - Remove before starting engine."

- (4) On the baggage door:
  - (a) "120 lb. maximum baggage and/or auxiliary seat passengers. For additional loading instructions, see weight and balance data."
    - Applicable to Models 182N, S/N 18260056 through 18260445.
  - (b) "120 lb. maximum baggage and/or auxiliary passenger forward of baggage door latch, and 80 pounds maximum baggage aft of baggage door latch. Maximum 200 lb. combined. For additional loading instructions see weight and balance data." Applicable to Models 182N, S/N 18260446 and up.
- (5) On flap control indicator:
  - (a) " $0^{\circ}$  to  $20^{\circ}$  T.O."
  - (b) " $10^{\circ} 20^{\circ} \text{Full}$ .

(Indices at these positions with blue color code and 160 m.p.h. callout, and white color code with 110 m.p.h. callout; mechanical detent at  $10^{\circ}$  and  $20^{\circ}$ )"

#### E. Applicable to Models 182P:

(1) In full view of the pilot:

(S/N 675, 18260826 through 18264295)

(a) "This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

# <u>Maximums</u>

Maneuvering speed 126 m.p.h. CAS (109 knots)

Gross weight 2950 lb.

Flight load factor Flaps up +3.8, -1.52 Flaps down +2.0

No acrobatic maneuvers, including spins, approved. Altitude loss in a stall recovery 160 ft. Known icing conditions to be avoided. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR." (as applicable)

#### (S/N 18264296 through 18265175)

(b) "This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

### Data Pertinent to Model Items I through XII, continued

## E. Applicable to Models 182P, continued:

#### **Maximums**

Maneuvering speed (IAS) 110 knots Gross weight 2950 lb.

Flight load factor Flaps up +3.8, -1.52

Flaps down +2.0

No acrobatic maneuvers, including spins, approved. Altitude loss in a stall recovery 160 ft. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR" (as applicable)

(2) On the fuel selector valve plate: (S/N 675, 18260826 through 18262250)

Standard range tanks: "Off. Left tank level flight only 31 gal. Both on for landing and takeoff

all flight attitudes, 60 gal. Right tank level flight only 31 gal."

Long range tanks: "Off. Left tank level flight only 39 gal. Both on for landing and takeoff

all flight attitudes, 79 gal. Right tank level flight only 39 gal."

On the fuel selector valve plate: (S/N 182622251 through 18265175)

Standard range tanks: "Off. Left tank level flight only 29 gal. Both on for landing and takeoff

all flight attitudes, 56 gal. Right tank level flight only 29 gal."

Long range tanks: "Off. Left tank level flight only 37 gal. Both on for landing and takeoff

all flight attitudes, 75 gal. Right tank level flight only 37 gal."

- (3) On the control lock: "Control lock remove before starting engine."
- (4) On the baggage door: (S/N 18260826 through 18263475)

"120 lb. maximum baggage and/or auxiliary passenger forward of baggage door latch, and 80 lb. maximum baggage aft of baggage door latch. Maximum 200 lb. combined. For additional loading instructions, see weight and balance data."

On the baggage door: (S/N 675, 18263476 through 18265175)

"Forward of baggage door latch, 120 lb. maximum baggage and/or auxiliary passenger. Aft of baggage door latch, 80 lb. maximum baggage including 25 lb. maximum in baggage wall hat shelf. Maximum 200 lb. combined. For additional loading instructions see weight and balance data."

(5) On flap control indicator: (S/N 675, 18260826 through 18264295)

"(a)  $0^{\circ}$  to  $10^{\circ}$  - (Blue color code and 160 m.p.h. callout;

also, mechanical detent at 10°)

(b) 10° to 20°- Full (Indices at these positions with white color code and

110 m.p.h. callout; also, mechanical detent at 10° and 20°)"

On flap control indicator (S/N 18264296 through 18265175)

"(a)  $0^{\circ}$  to  $10^{\circ}$  - (Blue color code and 140 KTS callout;

also, mechanical detent at 10°)

(b) 10° to 20°- Full (Indices at these positions with white color code and

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95 KTS callout; also, mechanical detent at  $10^{\circ}$  and  $20^{\circ}$ )"

(6) Forward of the filler cap on the wing surface: (S/N 675, 18260826 through 18262250)

Standard range tanks: "Service this airplane with 80/87 minimum aviation grade gasoline.

Capacity 32.5 gal."

Long range tanks: "Service this airplane with 80/87 minimum aviation grade gasoline.

Capacity 42.0 gal."

## E. Applicable to Models 182P, continued:

Forward of the filler cap on the wing surface: (S/N 18262251 through 18265175)

Standard range tanks: "Service this airplane with 80/87 minimum aviation grade gasoline.

Capacity 30.5 gal."

Long range tanks: "Service this airplane with 80/87 minimum aviation grade gasoline.

Capacity 40.0 gal."

(7) On aft panel of baggage compartment:

"Oxygen refill." (All models with oxygen)

(8) Adjacent to overvoltage light:

"High voltage."

(9) Above the left fuel gauge:

"Do not turn off alternator in flight except in emergency."

(Model 182P, S/N 18260826 through 18261425)

## F. Applicable to Models 182Q:

(1) In full view of the pilot:

(a) S/N 18263479, 18265176 through 18266590

"This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

## **Maximums**

Maneuvering speed (IAS) 111 knots Gross weight 2950 lb.

Flight load factor Flaps up +3.8, -1.52

Flaps down +2.0

No acrobatic maneuvers, including spins, approved. Altitude loss in a stall recovery 160 ft. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR." (as applicable)

#### S/N 18266591 through 18267715

"The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the Normal Category. Other operating limitations which must be complied with when operating this airplane in this category are contained in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.

No acrobatic maneuvers, including spins, approved. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR." (as applicable)

(b) Near airspeed indicator:

S/N 18266591 through 18267715

"Maneuver Speed

111 KIAS"

## F. Applicable to Models 182Q, continued:

(2) On the fuel selector valve plate:

S/N 18263479, 18265176 through 18266590

Standard range tanks: "Off.

Left - 29 gal. Level flight only. Both - 56 gal. All flight attitudes. Both on for takeoff and landing. Right - 29 gal. Level flight only."

Long range tanks: "Off.

Left - 37 gal. Level flight only. Both - 75 gal. All flight attitudes. Both on for takeoff and landing. Right - 37 gal. Level flight only."

### S/N 18266591 through 18267715

"Take Off - Both - Landing, All Flight - 88.0 Gal. - Attitudes Left - 44.0 Gal. Level Flight Only Right - 44.0 Gal. Level Flight Only

Off."

(3) On the control lock: "Control lock - remove before starting engine."

(4) On the baggage door: "Forward of baggage door latch, 120 pounds maximum baggage and/or

auxiliary passenger. Aft of baggage door latch, 80 pounds maximum baggage including 25 pounds maximum in baggage wall hat shelf. Maximum 200 pounds combined. For additional loading instructions,

see weight and balance data."

(5) On flap control indicator:

"0° to  $10^{\circ}$  - (Blue color code and 140 KTS callout;

also, mechanical detent at 10°)"

"0° to 20° - Full (Indices at these positions with white color code and 95 KTS

callout; also, mechanical detent at 10° and 20°)"

(6) Forward of the filler cap on the wing surface:

S/N 18265176 through 18265965

Standard range tanks: "Service this airplane with 100/130 minimum aviation

grade gasoline. Capacity 30.5 gal."

Long range tanks: "Service this airplane with 100/130 minimum aviation

grade gasoline. Capacity 40.0 gal."

S/N 18263479, 18265966 through 18266590

Standard range tanks: "Service this airplane with 100LL/100 aviation

grade gasoline. Capacity 30.5 gal."

Long range tanks: "Service this airplane with 100LL/100 aviation grade

gasoline. Capacity 40.0 gal."

#### S/N 18266591 through 18267715

"Fuel 100LL/100 minimum grade aviation gasoline. Capacity 46 U.S. gal. Capacity 34.5 U.S. gal. to bottom of filler collar."

## F. Applicable to Models 182Q, continued:

(7) On aft panel of baggage compartment:

"Oxygen refill." (All models with oxygen)

(8) Adjacent to overvoltage light:

S/N 18263479, 18265176 through 18266590

"High Voltage"

S/N 18266591 through 18267715

"Low Voltage"

#### G. Applicable to Models R182 and TR182, S/N R18200001 through R18201928:

(1) In full view of the pilot:

### (a) <u>S/N R18200002 through R18200583</u>

"This airplane must be operated as a normal category airplane in compliance with the operating limitations as stated in the form of placards, markings and manuals.

#### **Maximums**

Gross weight 3100 lb.

Flight load factor Flaps up +3.8, -1.52Flaps down +2.0

No acrobatic maneuvers, including spins, approved. Altitude loss in a stall recovery 240 ft. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR." (as applicable)

## (b) S/N R18200001, R18200584 through R18202041

"The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the Normal Category. Other operating limitations which must be complied with when operating this airplane in this category are contained in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.

No acrobatic maneuvers, including spins, approved. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR." (as applicable)

## (c) Near Airspeed Indicator:

# "MAX SPEED - KIAS

Maneuver 112 Gear Oper 140 Gear Down 140"

#### (2) On the fuel selector valve plate:

# (a) S/N R18200002 through R18200583

Standard range tanks: "Off

Left - 29 gal. Level flight only. Both - 56 gal. All flight attitudes. Both on for takeoff and landing. Right - 29 gal. Level flight only."

Long range tanks: "Off

Left - 37 gal. Level flight only. Both - 75 gal. All flight attitudes. Both on for takeoff and landing. Right - 37 gal. Level flight only."

# G. Applicable to Models R182 and TR182, S/N R18200001 through R18201928, continued:

## (b) S/N R18200001, R18200584 through R18201798

"Take Off - Both - Landing, All Flight - 88.0 Gal. - Attitudes Left - 44.0 Gal. Level Flight Only Right - 44.0 Gal. Level Flight Only Off."

#### (c) S/N R18201799 through R18202041

"Both - 88.0 Gal. - Take Off - Landing - All Flight Attitudes; Left - 44.0 Gal. - Level Flight Only Right - 44.0 Gal. - Level Flight Only Off - Off."

# (3) On the control lock:

(a) S/N R18200001 through R18201798

"Control lock - Remove before starting engine."

(b) S/N R18201799 through R18202041

"Caution! Control Lock - Remove before starting engine."

(4) On the baggage door: "120 Pounds Maximum

Baggage And/Or Auxiliary Passenger Forward of Baggage Door Latch And

80 Pounds Maximum

Baggage Aft of Baggage Door Latch Maximum 200 Pounds Combined

For Additional Loading Instructions See Weight and Balance Data"

## (5) On the flap control indicator:

"0° to 10° - (Blue color code and 140 KTS callout; also, mechanical detent at  $10^\circ$ )"

"0° to 20° - Full (Indices at these positions with white color code and 95 KTS callout; also, mechanical detent at 10° and 20°)"

(6) Forward of the filler cap on the wing surface:

# (a) S/N R18200002 through R18200583

Standard range tanks: "Service this airplane with 100LL/100 aviation grade gasoline.

Capacity 30.5 gal."

Long range tanks: "Service this airplane with 100LL/100 aviation grade gasoline.

Capacity 40.0 gal."

## (b) S/N R18200001, R18200584 through R18202041

Fuel 100LL/100 minimum grade aviation gasoline. Capacity 46 U.S. gal. Capacity 34.5 U.S. gal. to bottom of filler collar."

# (7) Adjacent to overvoltage light:

(a) <u>S/N R18200002 through R18200583</u>

"High Voltage"

(b) <u>S/N R18200001, R18200584 through R18202041</u> "Low Voltage"

## G. Applicable to Models R182 and TR182, S/N R18200001 through R18201928, continued:

(8) Near gear hand pump:

"Manual Gear Extension

- 1. Select Gear Down
- 2. Pull Handle Fwd.
- 3. Pump Vertically

**CAUTION** 

Do Not Pump With Gear

Up Selected"

(9) Forward of each fuel filler cap:

"Fuel Cap Forward - Arrow Alignment, Cap Must Not Rotate During Closing."

## H. Applicable to Models 182R and T182, S/N 18267302, 18267716 through 18268293:

- (1) In full view of the pilot:
  - (a) "The markings and placards installed in this airplane contain operating limitations which must be complied with when operating this airplane in the Normal Category. Other operating limitations which must be complied with when operating this airplane in this category are contained in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual.

No acrobatic maneuvers, including spins, approved. Flight into known icing conditions prohibited. This airplane is certified for the following flight operations as of date of original airworthiness certificate: DAY-NIGHT-VFR-IFR." (as applicable).

(b) Near airspeed indicator:

"Maneuver Speed

111 KIAS"

- (2) On the fuel selector valve plate:
  - (a) <u>S/N 18267716 through 18268055</u>

"Take Off - Both - Landing, -

All Flight - 88.0 Gal. - Attitudes

Left - 44.0 Gal. Level Flight Only

Right - 44.0 Gal. Level Flight Only

Off."

(b) <u>S/N 18268056 through 18268586</u>

"Both - 88.0 Gal. - Takeoff - Landing - All Flight Attitudes

Left - 44.0 Gal. - Level Flight Only

Right - 44.0 Gal. - Level Flight Only

Off - Off."

- (3) On the control lock:
  - (a) <u>S/N 18267716 through 18268055</u>

"Control Lock - Remove before starting engine."

(b) <u>S/N 18268056 through 18268586</u>

"Caution! Control Lock - Remove before starting engine."

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## Data Pertinent to Model Items I through XII, continued

# H. Applicable to Models 182R and T182, S/N 18267302, 18267716 through 18268293, continued:

## (4) On baggage door:

"120 Pounds Maximum
Baggage And/Or Auxiliary Passenger
Forward of Baggage Door Latch and
80 Pounds Maximum
Baggage Aft of Baggage Door Latch
Maximum 200 Pounds Combined

For Additional Loading Instructions See Weight and Balance Data"

# (5) On flap control indicator:

"0° to 10° - (Blue color code and 140 KTS callout; also, mechanical detent at  $10^{\circ}$ )"

"0° to 20° - Full (Indices at these positions with white color code and 95 KTS calout; also mechanical detent at 10° and 20°)"

#### (6) Forward of the filler cap on the wing surface:

"Fuel 100LL/100 minimum grade aviation gasoline. Capacity 46 U.S. gal. Capacity 34.5 U.S. gal. to bottom of filler collar."

## (7) Forward of each fuel filler cap:

"Fuel cap fwd - arrow alignment, cap must not rotate during closing."

# (8) Adjacent to overvoltage light:

"Low Voltage"

# I. Applicable to Models R182 and TR182, S/N R18201929 through R18202041:

All placards required in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual must be installed in the appropriate locations.

# J. <u>Applicable to Models 182R and T182, S/N 18268294 through 18268586:</u>

All placards required in the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual must be installed in the appropriate locations.

# NOTE 3. The cylinder head thermistors must be installed as follows:

<u>Model</u>	Engine and Cylinder Head Number				
	<u>O-470-R</u>	<u>O-470-S</u>	<u>O-470-U</u>	<u>O-540-J</u>	<u>O-540-L</u>
182N (1970 and 1971 Model)	3	3	N/A	N/A	N/A
182P (1972 and 1973 Model)	2	3	N/A	N/A	N/A
182P (1974 Model)	1	3	N/A	N/A	N/A
182P (1975 and 1976 Model)	N/A	3	N/A	N/A	N/A
182Q (1977 through 1980 Model)	N/A	N/A	3	N/A	N/A
182R (1981 Model through 18268160)	N/A	N/A	5	N/A	N/A
182R (18268161 through 18268586)	N/A	N/A	3	N/A	N/A
T182 (1981 Model through 1985 Model)	N/A	N/A	N/A	N/A	1
R182 (1978 and 1979 Model)	N/A	N/A	N/A	5	N/A
R182 (1980 Model through 1986 Model)	N/A	N/A	N/A	4	N/A
TR182 (1979 Model)	N/A	N/A	N/A	N/A	3
TR182 (1980 Model through 1986 Model)	N/A	N/A	N/A	N/A	5

NOTE 4. The installation of the 0-470-S engine in Model 182N and Model 182P (1970 through 1974) will require a change of the oil temperature gauge. Reference Cessna Service Letter SE75-2 for information and instructions for this change.

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#### Data Pertinent to Model Items I through XII, continued

NOTE 5. The marking of the airspeed indicator with IAS provides an equivalent level of safety to CAR 3.757 when the approved airspeed calibration data presented in Section V of the Pilot's Operating Handbooks listed below is available to the pilot:

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182P, Cessna P/N D1062-13
                                       (S/N 18264296 through 18265175)
182Q, Cessna P/N D1087-13
                                       (S/N 18265176 through 18265965)
182Q, Cessna P/N D1114-13
                                       (S/N 18263479, 18265966 through 18266590)
182Q, Cessna P/N D1141-13PH
                                       (S/N 18266591 through 18267300)
                                       (S/N 18267301 through 18267715)
182Q, Cessna P/N D1176-13PH
182R. Cessna P/N D1196-13PH
                                       (S/N 18267716 through 18268055)
182R, Cessna P/N D1215-13PH
                                       (S/N 18268056 through 18268293)
182R, Cessna P/N D1233-13PH
                                       (S/N 18268294 through 18268368)
182R, Cessna P/N D1254-13PH
                                       (S/N 18268369 through 18268434)
T182, Cessna P/N D1197-13PH
                                       (S/N 18267302, 18267716 through 18268055)
T182, Cessna P/N D1216-13PH
                                       (S/N 18268056 through 18268293)
T182, Cessna P/N D1234-13PH
                                       (S/N 18268294 through 18268368)
T182, Cessna P/N D1234R1-13PH
                                       (Special) (S/N 18268365)
T182, Cessna P/N D1255-13PH
                                       (S/N 18268369 through 18268434)
R182, Cessna P/N D1115-13
                                       (S/N R18200002 through R18200583)
R182, Cessna P/N D1142-13PH
                                       (S/N R18200584 through R18201313)
R182, Cessna P/N D1177-13PH
                                       (S/N R18201314 through R18201628)
R182, Cessna P/N D1198-13PH
                                       (S/N R18201629 through R18201798)
R182, Cessna P/N D1217-13PH
                                       (S/N R18201799 through R18201928)
R182, Cessna P/N D1235-13PH
                                       (S/N R18201929 through R18201973)
R182, Cessna P/N D1256-13PH
                                       (S/N R18201974 through R18201999)
R182, Cessna P/N D1277-13PH
                                       (S/N R18202000 through R18202031)
R182, Cessna P/N D1299-13PH
                                       (S/N R18202032 through R18202041)
TR182, Cessna P/N D1143-13PH
                                       (S/N R18200001, R18200584 through R18201313
                                       except R18200975)
TR182, Cessna P/N D1143-2-13PH
                                       (Special) (S/N R18200975)
TR182, Cessna P/N D1178-13PH
                                       (S/N R18201314 through R18201628 except R18201315)
TR182, Cessna P/N D1199-13PH
                                       (S/N R18201629 through R18201798)
TR182, Cessna P/N D1218-13PH
                                       (S/N R18201799 through R18201928)
TR182, Cessna P/N D1236-13PH
                                       (S/N R18201929 through R18201973)
TR182, Cessna P/N D1257-13PH
                                       (S/N R18201974 through R18201999)
TR182, Cessna P/N D1278-13PH
                                       (S/N R18201315, R18202000 through R18202031)
TR182, Cessna P/N D1300-13PH
                                       (S/N R18202032 through R18202041)
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# NOTE 6. 14-volt electrical system

(182 series through S/N 18265965 except 18263479)

28-volt electrical system

(182 series S/N 18263479, 18265966 through 18268586)

(R182 and TR182 series S/N R18200001 through R18202041)

NOTE 7: Special Ferry Flight Authorization. Flight Standards District Offices are authorized to issue Special overweight ferry flight authorizations. These airplanes are structurally satisfactory for ferry flight if maintained within the following limits: (1) Takeoff weight must not exceed 130% of the maximum weight for Normal Category; and (2) The Never Exceed Airspeed (VNE) and Maximum Structural Cruising Speed (VC) must be reduced by 30%; and (3) Forward and aft center of gravity limits may not be exceeded; and (4) Structural load factors of +2.5 g. to -1.0 g. may not be exceeded. Requirements for any additional engine oil should be established in accordance with Advisory Circular AC23.1011-1. Increased stall speeds and reduced climb performance should be expected for the increased weights. Flight characteristics and performance at the

increased weights have not been evaluated. Procedures for issuing a Flight Permit for operations of overweight aircraft may be found in Advisory Circular AC21-4B

In addition to the above specified placards, the prescribed operating limitations indicated by an asterisk (\*) under Sections I through XII must also be displayed by permanent markings.

## XIII - Model 182S, Skylane, 4 PCLM (Normal Category), Approved October 3, 1996

Engine: Lycoming IO-540-AB1A5, rated 230 BHP

Fuel: 100/100LL minimum grade aviation gasoline

Engine Limits: For all operations, 2400 r.p.m.

Propeller and

(1) McCauley Constant Speed

Propeller Limits: (a) Propeller: B2D34C235/90DKB-8 (2 blades)

Diameter: not over 82 in., not under 80.5 in. Pitch settings at 30 in. sta.: Low 17.0°, High 31.8°

(b) McCauley Spinner: D-7267-2

(c) McCauley Governor: DC290D1/T8

(2) McCauley Constant Speed

(a) Propeller: B3D36C431/80VSA-1 (3 blades)
Diameter: not over 79 in., not under 77.5 in.

Pitch settings at 30 in. sta.: Low 14.9°, High 31.7°

(b) McCauley Spinner: D-7262-2

(c) McCauley Governor: DC290D1/T8

**Airspeed Limits:** 

Maneuvering:110 Knots IAS(108 Knots CAS)Max. Structural Cruising:140 Knots IAS(138 Knots CAS)Never Exceed:175 Knots IAS(170 Knots CAS)Flaps Extended:100 Knots IAS(99 Knots CAS)

**CG Range:** 

Normal Category:

(1) Aft Limits: 46.0 inches aft of datum at 3100 lbs. or less.

(2) Forward Limits: Linear variation from 40.9 inches aft of datum at 3100 pounds to 33.0 inches aft of datum at 2250 lbs.; 33.0 inches aft of datum at 2250

lbs. or less.

Empty Wt. C.G. Range: None

**Reference Datum:** Front Face of Firewall

MAC: 58.8 inches; Leading edge of MAC 25.98 inches aft of datum

Leveling Means: Left side of Tailcone at 139.65 inches and 171.65 inches aft of datum

Maximum Weights: (See NOTE 5)

Maximum Ramp:3110 lbs.Maximum Takeoff:3100 lbs.Maximum Landing:2950 lbs.

No. of Seats: 4 (2 at 32.0 to 50.0 inches aft of datum, 2 at 74.0 inches aft of datum)

Maximum Baggage: 200 lbs. (120 lbs. at 92.0 to 108.0 inches aft of datum)

(80 lbs. at 108.0 to 136.0 inches aft of datum)

Fuel Capacity (Gal.): 92 gal. total; 88 gal. usable

(Two 46 gal. integral tanks in wings at 46.5 inches aft of datum)

See NOTE 1 for data on usable fuel.

Oil Capacity (Qts.): 12.0 qts. at 14.8 inches forward of datum; 5 qts. usable

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#### XIII - Model 182S, Skylane, continued

#### **Control Surface Movements:**

Wing Flaps: Down  $38^{\circ} + 0^{\circ}$ ,  $-1^{\circ}$  Elevator Tab: Up  $24^{\circ} \pm 2^{\circ}$  Down  $15^{\circ} \pm 1^{\circ}$  Ailerons: Up  $20^{\circ} \pm 2^{\circ}$  Down  $15^{\circ} \pm 2^{\circ}$  Elevator: Up  $28^{\circ} \pm 1^{\circ}$  Down  $21^{\circ} \pm 1^{\circ}$ 

(Relative to stabilizer)

Rudder: Right:  $24^{\circ} + 0^{\circ}$ ,  $-1^{\circ}$  Left:  $24^{\circ} + 0^{\circ}$ ,  $-1^{\circ}$ 

(Parallel to 0.00 W.L.)

Right:  $27^{\circ}13' + 0^{\circ}$ ,  $-1^{\circ}$  Left:  $27^{\circ}13' + 0^{\circ}$ ,  $-1^{\circ}$ 

(Perpendicular to hinge line)

Serial Nos. Eligible 18280001 and On

Data Pertinent to Model 182S:

#### Certification Basis (Model 182S)

Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-6, except as follows:

FAR 23.423; 23.611; 23.619; 23.623; 23.689; 23.775; 23.871; 23.1323; and 23.1563 as amended by Amendment 23-7. FAR 23.807 and 23.1524 as amended by Amendment 23-10. FAR 23.507; 23.771; 23.853(a),(b) and (c); and 23.1365 as amended by Amendment 23-14. FAR 23.951 as amended by Amendment 23-15. FAR 23.607; 23.675; 23.685; 23.733; 23.787; 23.1309 and 23.1322 as amended by Amendment 23-17. FAR 23.1301 as amended by Amendment 23-20. FAR 23.1353; and 23.1559 as amended by Amendment 23-21. FAR 23.603; 23.605; 23.613; 23.1329 and 23.1545 as amended by Amendment 23-23. FAR 23.441 and 23.1549 as amended by Amendment 23-28. FAR 23.779 and 23.781 as amended by Amendment 23-33. FAR 23.1; 23.51 and 23.561 as amended by Amendment 23-34. FAR 23.301; 23.331; 23.351; 23.427; 23.677; 23.701; 23.735; and 23.831 as amended by Amendment 23-42. FAR 23.961; 23.1093; 23.1143(g); 23.1147(b); 23.1303; 23.1357; 23.1361 and 23.1385 as amended by Amendment 23-43. FAR 23.562(a), 23.562(b)2, 23.562(c)1, 23.562(c)2, 23.562(c)3, and 23.562(c)4 as amended by Amendment 23-44. FAR 23.33; 23.53; 23.305; 23.321; 23.485; 23.621; 23.655 and 23.731 as amended by Amendment 23-45.

FAR 36 dated December 1, 1969, as amended by Amendments 36-1 through 36-21.

### **Equivalent Safety Items:**

Induction System Icing Protection
 FAR § 23.1093.
 Throttle Control
 FAR § 23.1143(g)
 Mixture Control
 FAR § 23.1147(b)

Date of Application for Amended Type Certificate was January 22, 1996.

Type Certificate No. 3A13 was amended October 3, 1996.

### Production Basis (Model 182S)

Production Certificate No. PC-4 issued June 30, 1997. Applies to airplane serial numbers 18280013, 18280016, 18280017, 18280019 and on. Airplane serial numbers not listed were produced under Type Certificate only. Cessna is authorized to issue airworthiness certificates under the delegation provisions of Delegation Option Authorization No. CE-1 in accordance with Part 21 of the Federal Aviation Regulations.

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#### XIII - Model 182S, Skylane (Cont'd)

#### **Equipment**

NOTE 5:

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane for certification.

NOTE 1: Weight and Balance:

Serial Nos. 18280001 and On; (Model 182S)

The certificated basic empty weight and corresponding center of gravity location must include unusable fuel of 24 lbs. at 48 inches aft of datum, and full oil of 16.2 lb. at 14.8 inches forward of datum.

NOTE 2: FAA Approved Airplane Flight Manual (AFM): Part number 182SPHUS00 or later FAA approved revisions are applicable to the Model 182S. The Airplane must be operated according to the appropriate AFM. Required placards are included in the AFM.

NOTE 3: The CHT probe must be installed on Head #1.

NOTE 4: Special Ferry Flight Authorization. Flight Standards District Offices are authorized to issue Special overweight ferry flight authorizations. This airplane is structurally satisfactory for ferry flight if maintained within the following limits: (1) Takeoff weight must not exceed 130% of the maximum weight for Normal Category; and (2) The Never Exceed Airspeed (VNE) and Maximum Structural Cruising Speed (VC) must be reduced by 30%; and (3) Forward and aft center of gravity limits may not be exceeded; and (4) Structural load factors of +2.5 g. to -1.0 g. may not be exceeded. Requirements for any additional engine oil should be established in accordance with Advisory Circular AC23.1011-1. Increased stall speeds and reduced climb performance should be expected for the increased weights. Flight characteristics and performance at the increased weights have not been evaluated. Procedures for issuing a Flight Permit for operations of overweight aircraft may be found in Advisory Circular AC21-4B

Model 182S airplane serial numbers 18280617 through 18280670 may differ structurally and are, therefore, not eligible for any weight increases above the approved maximum takeoff weight limit of 3,100 pounds. Any exceptions must first be coordinated with the Wichita Aircraft Certification Office. Exceptions to this limitation have been inspected and found to comply with type data for the Model 182S, and include the following serial number aircraft: 18280620.

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